AMENDMENTS TO THE CLAIMS

Please cancel Claims 4, 6 and 24.

Please amend Claim 1, 5, 7-9, 13, 15, 23, 27 and 28 as indicated below.

1. (Currently Amended for the Third Time) A process of forming a gate structure on a semiconductor substrate, comprising:

providing a semiconductor substrate having a channel region formed therein so as to define a source and a drain region and a gate structure comprised of a gate dielectric positioned on said channel region and a conductive layer positioned on said gate dielectric;

implanting ~~an insulator element region~~ nitrogen into said substrate; and

~~transforming a portion of said conductive layer adjacent said insulator element region into~~ conducting a source/drain reoxidation, thereby forming a sidewall spacer after ~~forming the insulator element region~~ implanting said nitrogen.

2. (Previously Canceled)

3. (Previously Amended) The process of Claim 1, wherein said substrate comprises silicon.

4. (Currently Canceled)

5. (Currently Amended) The process of Claim 4, wherein ~~forming said insulator element region~~ implanting said nitrogen comprises doping the substrate with greater than about 10^{12} nitrogen atoms.

6. (Currently Canceled)

7. (Currently Amended) The process of Claim ~~6~~ 1, wherein said conductive layer comprises polysilicon.

8. (Currently Amended) The process of Claim ~~6~~ 1, wherein ~~oxidizing said portion further~~ conducting said source/drain reoxidation comprises growing a bird's beak region extending laterally into a selected portion of said conductive layer.

9. (Currently Amended) The process of Claim ~~6~~ 1, ~~wherein oxidizing said portion further~~ conducting said source/drain reoxidation comprises forming a nitride layer on said semiconductor substrate.

10. (Original) The process of Claim 9, wherein said nitride layer laterally extends under at least a portion of said conductive layer.

11. (Original) The process of Claim 1, wherein said gate dielectric comprises silicon oxide.

12. (Original) The process of Claim 1, further comprising depositing a second sidewall spacer over the sidewall spacer.

13. (Currently Amended) A process of forming a gate structure on a semiconductor wafer comprising the steps of:

providing a semiconductor substrate having a channel region formed therein so as to define a source region and a drain region and a gate structure comprised of an isolation layer positioned on said channel region and a conductive layer positioned on said isolation layer;

implanting ~~an insulator element~~ nitrogen into said source and drain regions;

oxidizing a portion of said conductive layer adjacent said implanted source and drain regions to form an oxide spacer and a protective layer over said source and drain regions, said protective layer comprising said ~~insulator element~~ nitrogen and characterized by a dielectric constant higher than that of silicon oxide.

14. (Original) The process of Claim 13, wherein oxidizing said portion of said conductive layer comprises growing a bird's beak region extending laterally into a selected portion of said conductive layer and said protective layer extending at least partially under said conductive layer.

15. (Currently Amended for the Second Time) A process of forming a gate structure on a semiconductor wafer comprising the steps of:

providing a semiconductor wafer having a channel region formed therein so as to define a source and a drain region and a gate structure comprised of an isolation layer positioned over said channel region and a conductive layer positioned over said isolation layer;

forming a nitrogen-rich region by implanting nitrogen into said source and drain regions;

conducting an oxidation step after forming said nitrogen-rich region, thereby transforming a portion of said conductive layer adjacent said nitrogen-rich region into an

oxide spacer; and simultaneously combining a portion of said substrate with said nitrogen to form a nitride protective layer over said substrate; and

depositing a sidewall spacer over the oxide spacer.

23. (Currently Amended for the Second Time) A process of eliminating hot electron injection into a gate electrode positioned on a gate oxide adjacent a channel interposed between a source and a drain region in a silicon substrate, the process comprising:

forming a nitrogen doped region in said source and drain regions by nitrogen implantation; and

forming a silicon nitride film over a portion of said gate electrode so that a portion of said silicon nitride film penetrates under said gate electrode during said forming step wherein said portion of said silicon nitride film prevents hot electron injection into said gate electrode, wherein forming said silicon nitride film includes conducting a source/drain reoxidation after forming said nitrogen doped region.

24. (Currently Canceled)

25. (Original) The process of Claim 23, further comprising double diffuse boron implanting said source and drain regions.

26. (Original) The process of Claim 23, further comprising:

depositing an insulating layer over said gate electrode; and

anisotropically etching said insulating layer to form sidewall spacers.

27. (Currently Amended) The process of Claim ~~24~~ 23, further comprising source/drain implanting said source and drain regions.

28. (Currently Amended) The process of Claim ~~25~~ 27, further comprising lightly doping said source and drain regions to grade a junction between said channel and said source and drain regions.